



WASHINGTON STATE DEPARTMENT OF
Natural Resources

The Washington State Industrial Fire Precaution Level System

What are Industrial Fire Precaution Levels

By law, the Washington Department of Natural Resources (DNR) uses two closure systems for reducing the risk of wildfires on 12 million acres of private and state forest land that receives fire protection from the department.

Activated when needed during the summer fire season, one closure system applies to woods workers and other forest industrial users. The other set of protections is aimed at the general public, but also includes local residents, landowners, recreationists and forest workers.

Woods workers are required to observe both sets of restrictions as fire danger dictates. Other land users only need to follow the public use restrictions.

Industrial Precautions

The DNR, US Forest Service, Bureau of Land Management, and Bureau of Indian Affairs all use the same four-level industrial regulation system. This system, which helps prevent wildfires by regulating work in the woods, is known as the Industrial Fire Precaution Level (IFPL) system.

Below are the levels and what they mean:

- Level I: Closed Fire Season: Fire equipment and firewatch service is required.
- Level II: Partial Hootowl: Limits certain activities between the hours of 8 p.m. and 1 p.m.
- Level III: Partial Shutdown: Prohibits some activities altogether and limits other activities between the hours of 8 p.m. and 1 p.m.
- Level IV: General Shutdown: All operations prohibited.

Operation: Power Saws			
Precaution Level	Landing	Tractor/Skidder	Other Woods Saws
I. Closed Season	Fire Watch	Fire Watch	Fire Watch
II. Partial Hootowl	Fire Watch	Hootowl	Hootowl
III. Partial Shutdown	Hootowl	Hootowl	Prohibited
IV. General Shutdown	Prohibited	Prohibited	Prohibited

Operation: Yarding			
Precaution Level	Tractor/skidder	Cable (gravity systems)	Other Cable Systems
I. Closed Season	Fire Watch	Fire Watch	Fire Watch
II. Partial Hootowl	Fire Watch	Hootowl	Hootowl
III. Partial Shutdown	Hootowl	Hootowl	Prohibited
IV. General Shutdown	Prohibited	Prohibited	Prohibited

Other Operations			
Precaution Level	Loading	Blasting	Welding
I. Closed Season	Fire Watch	Fire Watch	Fire Watch
II. Partial Hootowl	Fire Watch	Hootowl	Hootowl
III. Partial Shutdown	Hootowl	Hootowl	Hootowl
IV. General Shutdown	Prohibited	Prohibited	Prohibited

Public Use Restrictions

The DNR also administers Public Use Restrictions, which limits activities on forest land during periods of high fire danger.

Below are the restrictions and what they mean:

Summer Fire Rules: From April 15 through October 15, or longer if the fire danger warrants it, the following restrictions are in place:

1. Cigarette smoking on forest land is only allowed within vehicles.
2. Fireworks may not be lit on forest land, and
3. the non-industrial use of chain saws needs to follow IFPL requirements.

Burn Ban: During burn bans initiated by DNR, all open fires are prohibited. Burn bans initiated by DNR cover all lands DNR protects from wildfire, but may include other lands

protected by local fire departments or by federal agencies. Contact the DNR at 1-800-323-BURN or your local fire protection agency before your burn.

Closed Entry Areas: Where high fire hazards exist, DNR may designate certain areas as "regions of extra fire hazard" and post them accordingly. Land designated as closed to entry is only open to local residents and woods workers carrying out industrial jobs there. All other land uses, including recreation, are restricted. DNR typically designates these areas in the spring, signs them accordingly and keeps them closed to entry the entire fire season. Most closed entry designations occur by landowner request on private land west of the Cascades.

Forestland Closure: When very extreme fire weather conditions exist, DNR may issue an order restricting all access by all people to all activities on certain private and public forest lands. These closures, which are very rare, may even restrict local residents from returning home if the fire danger warrants it.

Continuing work during a logging shutdown:

Operators wishing to continue an activity that is prohibited under an industrial fire precaution level must obtain a written waiver from DNR. The operator must also obtain the landowner's permission to seek a waiver. DNR will not issue a waiver against the wishes of the landowner.

The operation must also be in compliance with all of Washington's fire protection laws and with general "fire safe" practices.

A fire safe operation is one where the chance of a fire start has been reduced or where a plan is made for early discovery and suppression should a fire ignite.

Examples of fire prevention measures include:

- wetting down or removal of slash fuel in the immediate operating area
- night operations, and
- ceasing activities when the relative humidity is less than 35 percent or during windy conditions.
- Increased fire detection and suppression measures may consist of:
 - pre-strung hose to the yarding or cutting area
 - providing a fire watch,
 - roving patrol during the waiver period as well as after working hours, and
 - providing an additional water supply or fire fighting tools.

Each operation is unique and must be evaluated relative to conditions existing at that site. An activity occurring in an alder stand on a north-facing slope would require fewer preventive or suppression measures to continue to operate during a shutdown. The same activity taking place in a conifer stand on a south-facing slope would require more stringent prevention and increase suppression steps.

A primary consideration when evaluating a fire safe operation will be fire prevention or reduction of ignition sources. Increased fire detection and suppression capabilities will be secondary but important concerns. In this case, an ounce of prevention is worth a pound of cure.

Waivers are most frequently granted to carry out road maintenance or operations in gravel pits. Waivers are seldom allowed for any purpose when level IV industrial precautions are in effect.

Firewatch Services

The purpose of the firewatch is to stay after the day's work is over and report any fire starts to the proper authorities. The firewatch is required to be on duty after the last power-driven equipment used by the operator has been shut down for the day. The firewatch must be on duty a minimum of one hour. During periods of high fire danger, DNR recommends the firewatch be on the operation site more than the mandated one hour.

A firewatch must:

- Visually observe all parts of the operation area on which industrial activity has been in progress.
- Be physically capable of fighting a fire and experienced in operating fire-fighting equipment.
- Have on-site communication (CB radio, cellular or radio phone) to summon in the event a fire breaks out. Transportation is also required in case radio or phone communication doesn't work.

The National Fire Danger Rating System

The National Fire Danger Rating System provides the technical basis for establishing the daily Industrial Fire Precaution Levels. The effort to establish a National Fire Danger Rating System (NFDRS) began in 1968. We have been using the current NFDRS version since 1978.

Fire danger rating is a guide for making short and medium range presuppression decisions; for anticipating requirements for suppression forces, prevention activities, etc. actions which require a day or two lead time.

Preplanned actions, such as the initial dispatch of suppression forces to a reported wildfire are commonly keyed to a fire danger rating system.

NFDRS characterizes fire danger by evaluating the approximate upper limit of behavior of wildfires occurring on a fire danger rating area during a 24-hour period. This is based on weather, topography and fuels.

The state of Washington has 38 of these areas which are referred to as Shutdown Zones. The bottom line of fire danger rating in the day-to-day operation of a fire program is the manning class. This is sometimes referred to as preparedness class, adjective class, precautions class or Industrial Fire Precaution Level (IFPL).

The idea is to divide the continuum of fire danger into discrete class to which preplanned management actions are keyed. The designations for the classes are commonly numerical, I (one) through IV (four), or adjective, Low through Moderate, High, and Very High to Extreme.

Manning classes are based on the historical 90th percentile of fire danger on a fire weather station by station basis. Based on analysis, the manning classes are keyed to both fire occurrence and/or fire behavior.

Using wildfire reports and historic fire danger, the level of incremental needs for specific levels of manning classes be made. This worst case approach reduces the uncertainty concerning actions on a particular class of day.